

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-39 (Cancelled)

40. (Currently Amended) ~~The isolated polypeptide of claim 39, wherein the peptide sequence has an identity of at least 95% with the amino acid sequence of a) or b) and wherein said polypeptide exhibits anti-viral and anti-tumoral activity~~ An isolated polypeptide comprising a peptide sequence having an identity of at least 95% identity with:
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2,
provided that the peptide sequence comprises the Q28R SNP
and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

41. (Previously Presented) The isolated polypeptide of claim 40, wherein the peptide sequence has an identity of at least 99% with the amino acid sequence of a) or b) and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

Claim 42 (Cancelled)

43. (Currently Amended) ~~The isolated polypeptide of claim 42, wherein the peptide sequence has an identity of at least 95% with the amino acid sequence of a) or b) and wherein said polypeptide exhibits anti-viral and anti-tumoral activity~~ An isolated polypeptide comprising a peptide sequence having an identity of at least 95% identity with:
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2,
provided that the peptide sequence comprises the Q70E SNP
and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

44. (Previously Presented) The isolated polypeptide of claim 43, wherein the peptide sequence has an identity of at least 99% with the amino acid sequence of a) or b) and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

Claim 45 (Cancelled)

46. (Currently Amended) ~~The isolated polypeptide of claim 45, wherein the peptide sequence has an identity of at least 95% with the amino acid sequence of a) or b) and wherein said polypeptide exhibits anti-viral and anti-tumoral activity~~ An isolated polypeptide comprising a peptide sequence having an identity of at least 95% identity with:
a) the amino acid sequence of SEQ ID NO. 2, or
b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

47. (Previously Presented) The isolated polypeptide of claim 46, wherein the peptide sequence has an identity of at least 99% with the amino acid sequence of a) or b) and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

Claims 48-49 (Cancelled)

50. (Withdrawn— Currently Amended) A method for ~~preventing or treating cancers, tumors, or immunological diseases;~~ metastasizing renal carcinomas, melanomas, lymphomas comprising follicular lymphomas and cutaneous T cell lymphoma, leukemias comprising hairy-cell leukemia, chronic lymphocytic leukemia and chronic myeloid leukemia, cancers of the liver, neck, head and kidneys, multiple myelomas, carcinoid tumours and tumours that appear following an immune deficiency comprising Kaposi's sarcoma in the case of AIDS, comprising administering to an individual a therapeutically effective amount of a therapeutic agent comprising the isolated polypeptide of any one of claims ~~39, 42, or 45~~ 40, 43, or 46 with a pharmaceutically acceptable excipient.

51. (Withdrawn— Currently Amended) A method for identifying a compound with an activity substantially similar to an activity of ~~an interferon alpha-5 protein that comprises one or more of a Q28R, Q70E, or C122S SNP(s), or the same SNP(s) at an equivalent position(s)~~, an isolated polypeptide of any one of claims 40, 43, or 46 comprising[[:]
- a) determining whether or the extent to which said compound exhibits an activity selected from the group consisting of dendritic cell maturation, cytokine release by CD4+ or CD8+ T-lymphocytes, cytokine release by monocytes, *in vitro* or *in vivo* antiviral activity, cellular antiproliferative activity on Daudi Burkitt's cell lines, cellular antiproliferative activity on TF-1 cell lines, *in vitro* or *in vivo* antiviral activity, and any combination of the foregoing activities; and
 - b) comparing the activity determined in step a) with the activity of said ~~interferon alpha-5 protein~~ polypeptide.

Claim 52 (Cancelled)

53. (Currently Amended) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least 99% with SEQ ID NO. 2, provided that said polypeptide comprises a Q28R, Q70E, or C122S SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.

Claims 54-56 (Cancelled)

57. (Previously Presented) An isolated polypeptide comprising:
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q28R SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.
58. (Previously Presented) An isolated polypeptide comprising:
- a) the amino acid sequence of SEQ ID NO. 2, or

- b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q70E SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.
59. (Previously Presented) An isolated polypeptide comprising:
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.
60. (Currently Amended) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least ~~[[90%]]~~ 99% with SEQ ID NO. 2, provided that said polypeptide comprises a Q28R, Q70E, or C122S SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.
61. (Previously Presented) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least 95% with SEQ ID NO. 2, provided that said polypeptide comprises a Q28R, Q70E, or C122S SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.
62. (Currently Amended) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least ~~[[90%]]~~ 95% with SEQ ID NO. 2, provided that said polypeptide comprises the C122S SNP and wherein said polypeptide exhibits anti-viral and anti-tumoral activity.
63. (New) An isolated polypeptide comprising a peptide sequence having an identity of at least 95% identity with
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits anti-proliferative activity.

64. (New) An isolated polypeptide comprising a peptide sequence having an identity of at least 95% identity with
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits anti-viral activity.
65. (New) An isolated polypeptide comprising a peptide sequence having an identity of at least 95% identity with
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits immunomodulatory activity.
66. (New) An isolated polypeptide comprising a peptide sequence having an identity of more than 95% identity with
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-proliferative activity.
67. (New) An isolated polypeptide comprising a peptide sequence having an identity of more than 99% identity with
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-proliferative activity.
68. (New) An isolated polypeptide comprising a peptide sequence having an identity of more

than 95% identity with

- a) the amino acid sequence of SEQ ID NO. 2, or
- b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q28R SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-proliferative activity.

69. (New) An isolated polypeptide comprising a peptide sequence having an identity of more than 99% identity with

- a) the amino acid sequence of SEQ ID NO. 2, or
- b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q28R SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-proliferative activity.

70. (New) An isolated polypeptide comprising a peptide sequence having an identity of more than 95% identity with

- a) the amino acid sequence of SEQ ID NO. 2, or
- b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q70E SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-proliferative activity.

71. (New) An isolated polypeptide comprising a peptide sequence having an identity of more than 99% identity with

- a) the amino acid sequence of SEQ ID NO. 2, or
- b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q70E SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-proliferative activity.

72. (New) An isolated polypeptide comprising
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q28R SNP.
73. (New) An isolated polypeptide comprising:
- a) the amino acid sequence of SEQ ID NO. 2 or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the Q70E SNP.
74. (New) An isolated polypeptide comprising
- a) the amino acid sequence of SEQ ID NO. 2, or
 - b) the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that the peptide sequence comprises the C122S SNP.
75. (New) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence of the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that said polypeptide comprises a Q28R, Q70E, or C122S SNP.
76. (New) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least 95% with the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that said polypeptide comprises a Q28R, Q70E, or C122S SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-tumoral activity.
77. (New) A therapeutic agent comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least 99% with the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, provided that said polypeptide comprises a Q28R, Q70E, or C122S SNP and wherein said polypeptide exhibits anti-viral, immunomodulatory, and/or anti-tumoral activity.

78. (New) A pharmaceutical composition comprising an isolated polypeptide comprising a peptide sequence of the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, wherein said polypeptide comprises the Q28R, Q70E, or C122S SNP.
79. (New) A pharmaceutical composition comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least 95% with the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, wherein said polypeptide comprises the Q28R, Q70E, or C122S SNP and exhibits anti-viral, immunomodulatory, and/or antiproliferative activity.
80. (New) A pharmaceutical composition comprising an isolated polypeptide comprising a peptide sequence that has an identity of at least 99% with the amino acid sequence of amino acids 24 through 189 of SEQ ID NO. 2, wherein said polypeptide comprises the Q28R, Q70E, or C122S SNP and exhibits anti-viral, immunomodulatory, and/or antiproliferative activity.
81. (New) A method for treating metastasizing renal carcinomas, melanomas, lymphomas comprising follicular lymphomas and cutaneous T cell lymphoma, leukemias comprising hairy-cell leukemia, chronic lymphocytic leukemia and chronic myeloid leukemia, cancers of the liver, neck, head and kidneys, multiple myelomas, carcinoid tumours and tumours that appear following an immune deficiency comprising Kaposi's sarcoma in the case of AIDS, comprising administering to an individual a therapeutically effective amount of a therapeutic agent comprising the isolated polypeptide of any one of claims 66, 68, 70, 72, 73 or 74 with a pharmaceutically acceptable excipient.